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**Remarks****Form PTO-1449 Matter**

In Applicant's previous submission of Paper #9, dated October 9, 2003, Applicants noted that the Examiner did not initial the reference "WO01/96104" on the Form PTO-1449 that was filed with the Disclosure Statement dated April 5, 2002. It was requested then and it is requested again now that the Examiner review and initial all of the references, including "WO01/96104", on the Form PTO-1449. A copy of the previously submitted Form PTO-1449 was enclosed for the Examiner's convenience with Applicant's previous submission. The Examiner is requested to initial the "WO01/96104" reference and return the fully initialed Form to the undersigned attorney.

Claims 1-22 and 46-48 are pending and stand rejected. Claims 23-45 have been restricted and canceled, without prejudice or disclaimer.

**§112 Rejection of Claims 1-22 and 46-48**

Claims 1-22 and 46-48 stand rejected under 35 USC § 112, first paragraph, for the same reasons as stated in the previous Office Action (Paper #8) that the claims fail to comply with the enablement requirement. In particular, the Office Action states again:

The specification fails to describe the non-metallic multi-layer optical film in such a manner that one of ordinary skill in the art would be enabled to duplicate it. On page 2, line 4, the film is described as an IR reflective film, which when the term was searched, the resulting films included a metal layer not desired by the applicant, resulting in one of ordinary skill not being able to reproduce the invention from the specification.

In response to Applicants' previous arguments to this rejection, the current Office States:

In response to Applicant's argument to look at the U.S. patents and PCT publications listed on page 13, lines 11-21 of the specification, the Examiner has looked at the reference, and each one states the presence of metal material in the patent.

**Applicants' Response**

The present specification on page 13, lines 11-21 states:

Suitable optical sheets comprise a **non-metallic multi-layer optical film** such as, for example, that described in U.S. Patents Nos. 6,207,260; 6,157,490; 6,049,419; 5,882,774; 5,360,659; 5,223,465; and 5,103,337 (RE 34,605) and in PCT Publications Nos. WO 99/36248 and WO 01/96104, and U.S. Patent Application Serial No. 60/261942, entitled MULTILAYER INFRARED REFLECTING FILM WITH HIGH

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AND SMOOTH TRANSMISSION IN VISIBLE WAVELENGTH REGION AND LAMINATE ARTICLES MADE THEREFROM and filed January 15, 2001, all of which are incorporated herein by reference in their entirety. Suitable optical sheets of the present invention may include, but are not necessarily limited to, infrared reflecting films, polarized films, non-polarized films, multi-layer films, colored or tinted films, and decorative films. (Emphasis Added)

The above passage from the present specification makes it clear that the cited references are being used to provide examples of "non-metallic multi-layer optical film". The optical films disclosed in these patents and publications teach that the disclosed optical films may also, not must, include one or more metallic layers or coatings (e.g., see US Patent No. 6, 207, 206, col. 14, line 65 through col. 15, line 5). The person of ordinary skill in the art would, therefore, look to these references for ways to make the "non-metallic multi-layer optical film" disclosed and taught by these references. Therefore, because the present specification does sufficiently describe a "non-metallic multilayer optical film", the present specification is fully enabling as to claims 1-22 and 46-48. Accordingly, this § 112 rejection was improper and should be withdrawn.

#### **§102 Rejection of Claims 1-22 and 46-48**

Claims 1-22 and 46-48 stand rejected under 35 USC § 102(e) for the same reasons as stated in the previous Office Action (Paper #8), as being anticipated by Frost et al. (U.S. Patent No. 6,352,754). In response to Applicants' previous arguments to this rejection, the current Office Action states:

Frost et al. states that a metal film can be chosen to endow the glazing component with thermal properties (Column 4, lines 58-67). The language of Frost et al. is stated so that the metal layer is optional, not required, to be present in the claimed article. This is represented by the language of claim 1 (Column 13, lines 5-19), which states that a ply of PET containing an opening in the surface and a functional layer of PVB are encased between two substrates of glass material without the presence of a metallic layer.

#### **Applicants' Response**

It is respectfully submitted that the Examiner is confused as to what is actually disclosed in Frost et al. In Column 2, lines 24-27, Frost et al. expressly teach what they mean by the term "functional layer" when they state:

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Here and throughout the text hereinafter, the thin layer or layers having thermal properties, especially properties of reflection in the infrared, will be referred to as the "functional layer or layers".

The only functional layers disclosed, taught or suggested by Frost et al. are metallic functional layers (see column 4, line 58 through column 5, line 19). Frost et al. do not indicate, in Column 4, lines 58-67, that films other than metallic films can be used for their functional layer. They are merely providing examples of some metallic films that can be used. Nowhere in Frost et al. is a layer of PVB taught to be an example of a "functional layer". In claim 1, Frost et al. expressly recites that the ply of PET is provided with at least one functional layer and that the PET/functional layer combination is disposed between two plies of PVB.

The present optical film is expressly disclosed and claimed as being non-metallic. Therefore, Frost et al does not disclose, teach or suggest each element recited in the present claims. Accordingly, the §102 rejection of claims 1-22 and 46-48 was improper and should be withdrawn, and the claims should be allowed.

In view of the fact that both of the rejections in this Office Action were improper and no amendments have been made to the claims, it is submitted that the Final status of this case was premature and improper. See MPEP §§706.07(a), (c) and (d).

In view of the above remarks, it is submitted that the application is in condition for allowance. Reconsideration of the application and the allowance of claims 1-22 and 46-48 at an early date is solicited.

Respectfully submitted,

1/21/04  
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